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| APPLICATION NO.      | FILING DATE                   | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|----------------------|-------------------------------|----------------------|---------------------|------------------|
| 10/591,117           | 08/30/2006                    | Jacques Thomasset    | 2590-164            | 7736             |
| 23117<br>NIXON & VAN | 7590 08/18/200<br>NDERHYE, PC | EXAMINER             |                     |                  |
| 901 NORTH G          | LEBE ROAD, 11TH F             | KASHNIKOW, ERIK      |                     |                  |
| ARLINGTON, VA 22203  |                               |                      | ART UNIT            | PAPER NUMBER     |
|                      |                               |                      | 1794                |                  |
|                      |                               |                      |                     |                  |
|                      |                               |                      | MAIL DATE           | DELIVERY MODE    |
|                      |                               |                      | 08/18/2009          | PAPER            |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|  | Application No.   | Applicant(s)   |  |  |  |  |
|--|---|--|--|--|--|--|
|  | 10/591,117  | THOMASSET ET AL.   |  |  |  |  |
| Office Action Summary  | Examiner  | Art Unit   |  |  |  |  |
|  | ERIK KASHNIKOW  | 1794   |  |  |  |  |
| The MAILING DATE of this communication app   | ears on the cover sheet with the c  | orrespondence address  |  |  |  |  |
| Period for Reply   |   |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period v  - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b). | ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE | N. nely filed the mailing date of this communication. D (35 U.S.C. § 133). |  |  |  |  |
| Status   |   |  |  |  |  |  |
| 1)⊠ Responsive to communication(s) filed on <u>26 M</u>  | av 2009   |  |  |  |  |  |
|  | action is non-final.  |  |  |  |  |  |
| <del>'=</del>  |   |  |  |  |  |  |
| closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.  |   |  |  |  |  |  |
| Disposition of Claims  |   |  |  |  |  |  |
| 4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.   |   |  |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |   |  |  |  |  |  |
| 5) Claim(s) is/are allowed.  |   |  |  |  |  |  |
| 6)⊠ Claim(s) <u>1-8</u> is/are rejected.   |   |  |  |  |  |  |
| 7) Claim(s) is/are objected to.  |   |  |  |  |  |  |
| 8) Claim(s) are subject to restriction and/or  | r election requirement.   |  |  |  |  |  |
| Application Papers   |   |  |  |  |  |  |
| 9)⊠ The specification is objected to by the Examine  | r.  |  |  |  |  |  |
| 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.   |   |  |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |   |  |  |  |  |  |
| Replacement drawing sheet(s) including the correct   | ion is required if the drawing(s) is obj  | ected to. See 37 CFR 1.121(d).   |  |  |  |  |
| 11)☐ The oath or declaration is objected to by the Ex  | aminer. Note the attached Office  | Action or form PTO-152.  |  |  |  |  |
| Priority under 35 U.S.C. § 119   |   |  |  |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of:   |   |  |  |  |  |  |
| 1. Certified copies of the priority documents have been received.  |   |  |  |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |   |  |  |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |   |  |  |  |  |  |
| application from the International Bureau  | •   | - 3  |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.   |   |  |  |  |  |  |
|  |   |  |  |  |  |  |
| Attachment(s)  |   |  |  |  |  |  |
| 1) Notice of References Cited (PTO-892)  | 4) Interview Summary  |  |  |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)   | Paper No(s)/Mail Da<br>5) Notice of Informal P  |  |  |  |  |  |
| a) Information Disclosure Statement(s) (PTO/SB/08)  Paper No(s)/Mail Date  | 6) Other:   |  |  |  |  |  |

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#### **DETAILED ACTION**

# Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

# Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohata et al. (JP 2001-163321).
- 4. In regards to claims 1, and 4 Dohata et al. teach a multi layer object which is to be further molded, as well as the object formed from said molding the original object (paragraph 0030). While there is no disclosure that the dose/parison is for compression molding as presently claimed, applicants attention is drawn to MPEP 2111.02 which

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states that "if the body of a claim fully and intrinsically sets forth all the limitations of the claimed invention, and the preamble merely states, for example, the purpose or intended use of the invention, rather than any distinct definition of any of the claimed invention's limitations, then the preamble is not considered a limitation and is of no significance to claim construction". Further, MPEP 2111.02 states that statements in the preamble reciting the purpose or intended use of the claimed invention must be evaluated to determine whether the purpose or intended use results in a structural difference between the claimed invention and the prior art. Only if such structural difference exists, does the recitation serve to limit the claim. If the prior art structure is capable of performing the intended use, then it meets the claim.

It is the examiner's position that the preamble does not state any distinct definition of any of the claimed invention's limitations and further that the purpose or intended use, i.e. for realization of an object by compression molding, recited in the present claims does not result in a structural difference between the presently claimed invention and the prior art parison/dose and further that the prior art structure which is a parison/dose identical to that set forth in the present claims is capable of performing the recited purpose or intended use.

5. Dohata shows an embodiment in Figure 2 (reference number 1) in which the inside resin layer has a varied distance from the axis of symmetry, and the inner resin layer is surrounded by the outer resin layer (paragraph 0026). Dohata et al. are silent

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regarding the concentration of the various layers, however it has been shown that absent a showing of criticality with respect to "resin concentrations" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "resin concentrations" through 第5回 122 routine experimentation to values, including those presently claimed in order to achieve "firm stable dose and -81multilayer container". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980). Figure 5 shows an article wherein the article has an imprisoned inner layer. It is also obvious to vary the concentrations of the resins given that the first resin provides structure to the dose and the functional layers provide properties, i.e. gas barrier properties, to the dose (pages 8-9), it would have been obvious to one of ordinary skill in the art to choose amounts of the first resin and the functional layer, including those presently claimed, depending on the desired properties of the dose. In regards to the limitation "for the realization of multilayer objects by compression molding" It is noted that the variation of the functional layer occurs, during extrusion and before any type of molding occurs.

6. In regards to claim 2 as seen from Figure 2, given that the functional layer does have a varied axis of symmetry, given from the Figure it is clear that Rmax is always greater than Rmin and given that Ro is a constant in the formula, it is clear that the reference meets the ratio of claim 2 Alternatively, given that the outside functional layer imparts outstanding mechanical characteristics, it would have been obvious to one of

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ordinary skill in the art to control the ratio (Rmin-Ro)/(Rmax-Ro) to values including those presently claimed in order that the functional resin is distributed throughout the object in order to produce object with effective and consistent mechanical properties.

- 7. In regards to claims 3 and 4, Dohata et al. teach an embodiment wherein a barrier layer is imprisoned between two adhesive layers (paragraph 0090).
- 8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Dohata et al. (JP 2001-163321) in view of Yang et al. (US 2004/0106723).
- 9. As stated above Dohata et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the final product being formed by compression molding.
- 10. Yang et al. teach that it is known in the art that blow molding and compression molding gas tanks made of polyolefin doses/parisons are functional equivalents (paragraphs 0210-0211).
- 11. One of ordinary skill in the art at the time of the invention would be motivated to modify the article of Dohata et al. with that of Yang et al. because the Yang et al. offers flexibility in the formation of final products.
- 12. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dohata et al (JP 2001-163321) in view of Langecker (US 4,883,630).

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13. As stated above Dohata et al. teach an article made of one resin with 2 layers of a functional resin embedded within and varied distances between the inner layer and the axis of symmetry. However they are silent regarding the process of cutting and adjusting the flow of the plastics.

- 14. Dohata et al. teach that the layers are formed by the extrusion of the layers into a mold as well as a cutting step to form the dose (paragraph 0030).
- 15. Langecker teaches a method for the making of a mold article comprised of a thermoplastic resin (column 1 lines 5-20) including embodiments wherein on layer surrounds the next layer (column 3 lines 62-64).
- 16. In regards to claim 6 and 7 Langecker teaches that rate of flow of the plastics into the mold can be varied. Langecker teaches that the optimum material distribution is taking place while the changing of the flow rates is going on (column 3 lines 42-64), one of ordinary skill in the art would recognize that to keep the optimum material distribution when the flow of one material is decreased the other has to be increased to make up the difference. Langecker also teaches phase opposition in claim 1 where it is taught that the resins are only injected one at a time, therefore when one is at full flow, the other is at no flow, and in a phase opposition.
- 17. In regards to claim 8 Langecker teaches a method which involves the injecting of at least one functional layer and at least on structural layer at different times in order to encapsulate one of the resins. Langecker also teaches the varying of the volume of the mold in proportion to the resin injected (claim 1).

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18. While Dohata et al. and Langecker are silent regarding pairing the cutting step with the variation in flow, it would have been obvious to one of ordinary skill in the art at the time of the invention to do this so that one obtains doses consistent in composition and interior design which would then lead to consistent articles made from said doses.

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- 19. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of Dohata et al. with the process of Langecker because the process of Dohata et al. would benefit from the confidence provided by the process of Langecker that an exact material distribution in the mold cavity is ensured (column 2 lines 59-64).
- 20. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over O'Mara (US 4,390,487) in view of Yoshikawa et al. (US 3,901,638).
- 21. O'Mara teaches a process for making an outer layer of plastic around a core of plastic material (column 1 lines 5-10). Figures 4-9 show embodiments wherein the distance between the functional layer and the axis of symmetry is varied.
- 22. O'Mara teaches that this is accomplished by the injection of the inner plastic material into a core area of a previously formed plastic material (column 4 lines 19-63), after this is done the extruder is turned off and then the outer layer (conductive layer in the reference) is extruded over the opening to completely enclose the inner layer.
- 23. While O'Mara teaches the above method they are silent with regards to ejecting the dose/parison in the molten state.

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24. Yoshikawa et al. teach that it is known in the dose/parison art to keep an injection molded device in a molten state after during ejection after formation (column 1 lines 17-25).

- 25. While O'Mara and Yoshikawa et al. are silent with regards to varying the volume in proportionality to the volume of resin injected it has been shown that absent a showing of criticality with respect to "this variance" (a result effective variable), it would have been obvious to a person of ordinary skill in the art at the time of the invention to adjust the "variance" through routine experimentation to values, including those presently claimed in order to achieve "a dose/parison of appropriate strength and functional properties". It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).
- 26. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the process of O'Mara with the process of Yoshikawa et al. because the process of O'Mara would benefit from the limiting of the handling of the device, and therefore saving money due to the less amount of work involved, as well as eliminate further steps which errors can be introduced of the process of Yoshikawa et al.

### Response to Arguments

27. Applicant's arguments, see arguments, filed 05/26/09, with respect to the Kawaguchi rejections have been fully considered and are persuasive. These rejections

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of the claims have been withdrawn. However under further consideration new rejections has been made over Dohata et al. and O'Mara.

28. Examiner points out that the **objection of the abstract** still stands.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIK KASHNIKOW whose telephone number is (571)270-3475. The examiner can normally be reached on Monday-Friday 7:30-5:00PM EST (Second Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Erik Kashnikow

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Examiner Art Unit 1794

/Rena L. Dye/ Supervisory Patent Examiner, Art Unit 1794